Appendix C

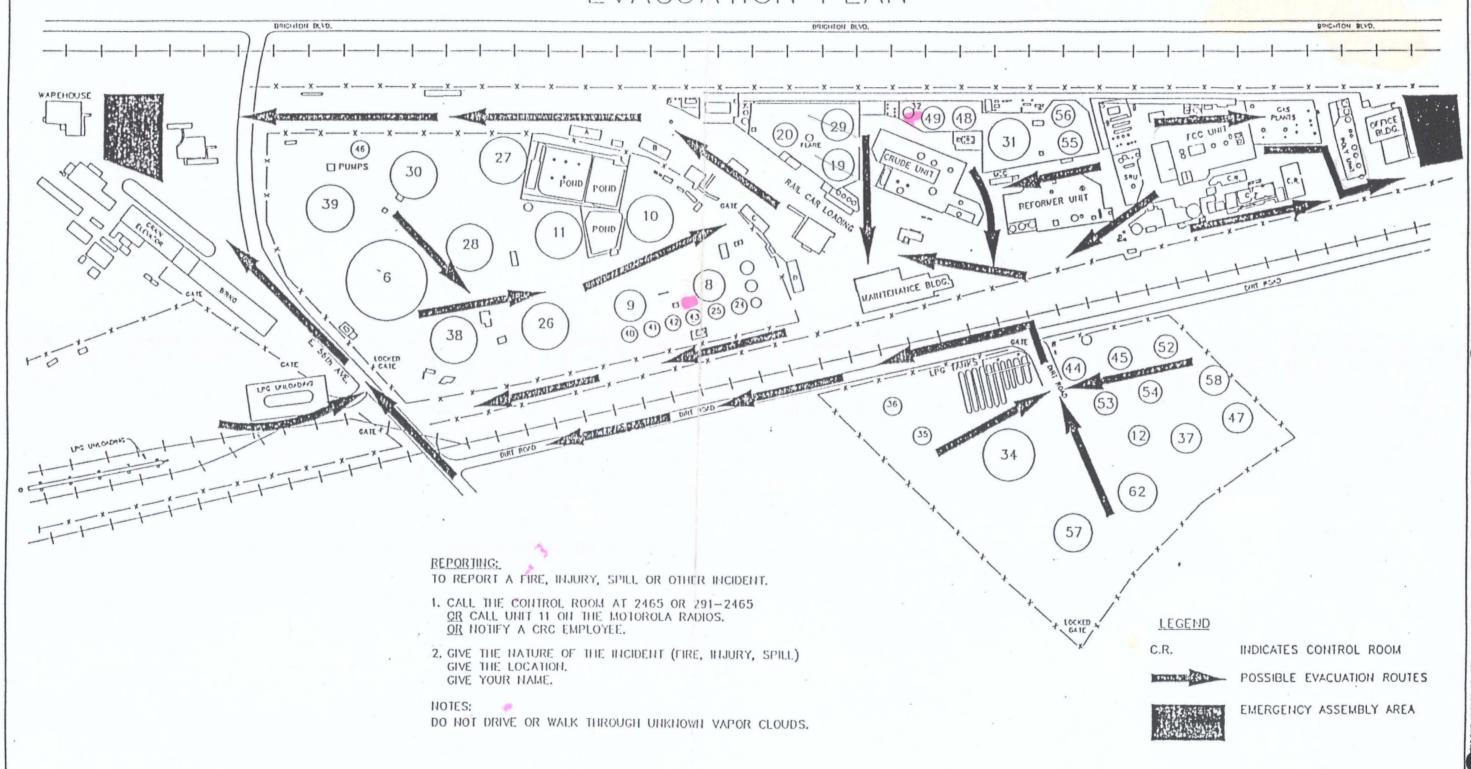
SITE MAPS

Figure 1 Colorado Refining Company Facility Layout

COLORADO REFINING COMPANY



EVACUATION PLAN



COLORADO REFINING COMPANY

VISITOR SAFETY REQUIREMENTS

The following is a list of BASIC REQUIREMENTS that must be complied with while you are in our refinery.

PROTECTIVE CLOTHING

- 1. The following protective clothing must be worn while on our refinery property:
 - Full length pants
 - Shirts with long sleeves, must buttoned at wrists.
 - Substantial shoes, leather, NO sandals or thongs. Steel toed boots are recommended.
 - Hard hats.
 - Safety glasses with side shields.
 - Hearing protection, in posted units.

SMOKING

- 1. Smoking is prohibited in our refinery except in designated areas.
- 2. Smoking is prohibited in vehicles while in our refinery.
- Safety matches and dual action lighters " ZIPPO" style are permitted.

VEHICLE OPERATING PROCEDURES

- 1. Refinery speed limits are 8 mph unless otherwise posted.
- Pedestrians, emergency vehicles and bicycles have the right-of-way.
- 3. Unattended vehicles must be shut off, keys left in ignition and park brake set. DO NOT BLOCK EMERGENCY EQUIPMENT.
- 4. permission must be obtained from area operators before driving in operating or tank farm areas.
- 5. Be aware of low clearances under piperacks.

PROHIBITIVE SUBSTANCES

- 1. No firearms, prohibitive drugs, or alcoholic beverages are allowed on the refinery property.
- 2. Anyone under the influence of alcohol or non prescription drugs will not be allowed on the refinery property.
- 3. Cameras are not allowed unless permission is obtained from the Refinery Manager.

WORK PERMITS

1. Work permits must be obtained before entering any operating area and performing work.

1. ALARMS -The refinery alarm is intermittent blasts on the steam whistle. The whistle is tested weekly at 12:00 noon on every Friday. This will be Three Short Blasts. During the Turnaround it will be sounded at 09:00 and 09:45 am, 12:00 and 12:30 pm, 02:45 and 03:00 pm for break notification.

EMERGENCY PROCEDURES AND INJURY REPORTING

H2S ALARMS - HYDROGEN SULFIDE (H2S) gas is generated in the refinery. In the event of a release an alarm will be activated. This alarm is located in the SRU with audible and visual alarms around the perimeter of this Unit. In the event of a release the steam whistle will sound for evacuation of the area.

- 2. If the alarm is sounded you are required to shut down all work, all powered equipment, including vehicles, and proceed to the assembly area closest to your location. Immediately check the wind direction and proceed upwind or crosswind away from operating areas. WALK...DO NOT RUN!!! The all clear is three short blasts on the steam whistle.
- 3. Keep all fire lanes clear and stay clear of emergency equipment.
- 4. ALL injuries must be reported to a CRC representative and the Safety Department immediately.

REFINERY ACCESS

- 1. All visitors must enter the refinery through one of the quarded gates or the office.
- 2. All visitors must sign in and out of the refinery.
- 3. A visitors pass may be required t enter the refinery.
- 4. Contractors must take the refinery orientation and display a briefing sticker on their hard hat to perform work in any area of the refinery.
- 5. Contract workers must sign in and out before and after performing work in the units or tank farm areas.

Appendix D

SPCC PLAN REVIEW FORMS

Appendix E

STORAGE TANK LISTING WASTEWATER TREATMENT SYSTEM DIAGRAMS SPCC PLAN

TANK	CONTENTS	TANK	THROUGHPUT (BBL/YR)	CAPACITY (BBL)	TURNOVERS PER YEAR
4	SLOP	FRT	NA	2370	NA
5	SLOP	FRT	NA	2370	NA
6	CRUDE	IFR	5664164	203000	28
8	ETHANOL	FRT	278937	25300	11
9	DIESL FUEL	FRT	1405470	25300	56
10	MID GRADE	FRT	388055	55900	7
11	PREM NOLEAD	FRT	663032	55900	12
12	KEROSINE	EFR	73980	10000	7
16	SLOP	FRT	1564	1400	1
792	UNFIN DIESL	FRT	335775	25300	13
20	SLOP	FRT	11296	10400	1
23	SLOP	FRT	2259	2000	1
24	MTBE	FRT	5293	5100	1
25	MTBE	FRT	5293	5100	1
26	CRUDE	FRT	1568538	55900	28
27	UNLEAD GAS	FRT	2152585	55900	39
28	MTBE	IFR	59990	55900	1
29<	SLOP	FRT	NA NA	25000	NA NA
30	UNLD GAS	FRT	2126908	55200	39
31	GAS OIL	FRT	1722431	51000	34
					1
32	SLOP	FRT	2259	2000	
34	UNFIN DIESL	FRT	965352	65000	15
35	REFORMATE	FRT	797197	10000	80
36	REFORMATE	EFR	797197	10000	80
37	NAPHTHA	IFR	1394665	25300	55
38	CRUDE	EFR	1481397	55000	27
39	VAC BTMS	FRT	316197	56000	6
40	MID GRADE	FRT	51917	7500	7
41	PREM NOLD	FRT	88705	7500	12
42	PREM DIESL	FRT	273306	7500	36
43	DIESL FUEL	FRT	419816	7500	56
44	REFORMATE	EFR	797197	10000	80
45	UNFIN DIESL	FRT	146901	10000	15
46	CAT SLURY	FRT	74604	14000	5
47	LT ST RUN	EFR	701987	31474	22
48	JET A	FRT	84549	10500	8
49	JET A	FRT	84549	10500	8
52	FCC GASO	EFR	727993	11000	66
53	POLY GASO	IFR	333358	11000	30
54	FCC GASO	EFR	727993	11000	66
55	GAS OIL	FRT	334917	10000	33
56	GAS OIL	FRT	334917	10000	33
57	UNFIN DIESL	FRT	608592	41000	15
58	NAPHTHA	IFR	1451591	26300	55
62	JET A	FRT	285352	36000	8
1A	CRUDE	FRT	4783812	550	8698
1B	CRUDE	FRT	4783812	550	8698
2A	CRUDE	FRT	4783812	550	8698
2B	CRUDE	FRT	4783812	550	8698

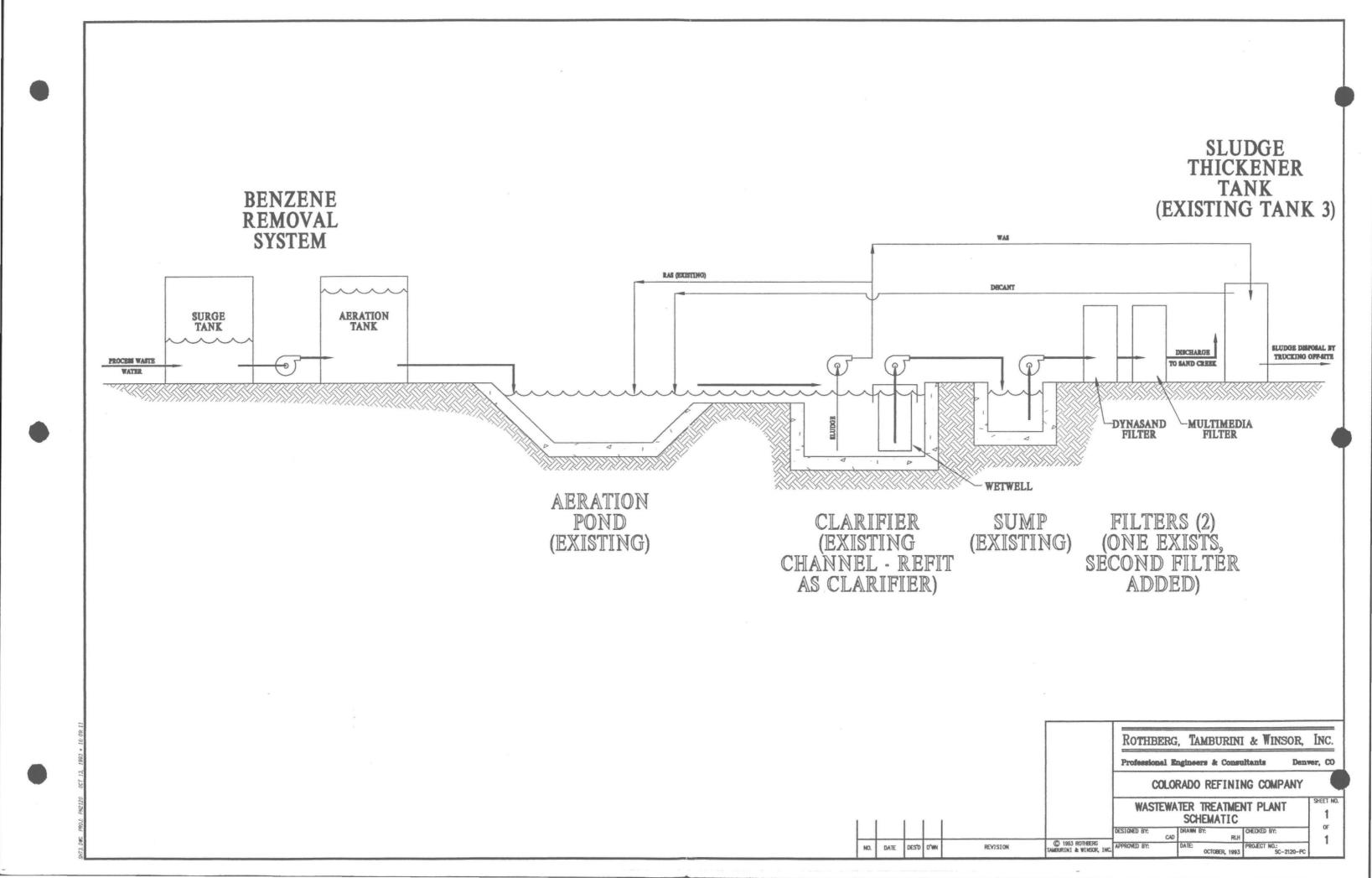
DRAFT

Conv. to water treatment To be replaced w/ new tank

Convert to water treatment

KEY: FRT - FIXED ROOF TANK

IFR - INTERNAL FLOATING ROOF TANK EFR - EXTERNAL FLOATING ROOF TANK N/A - INFORMATION NOT AVAILABLE



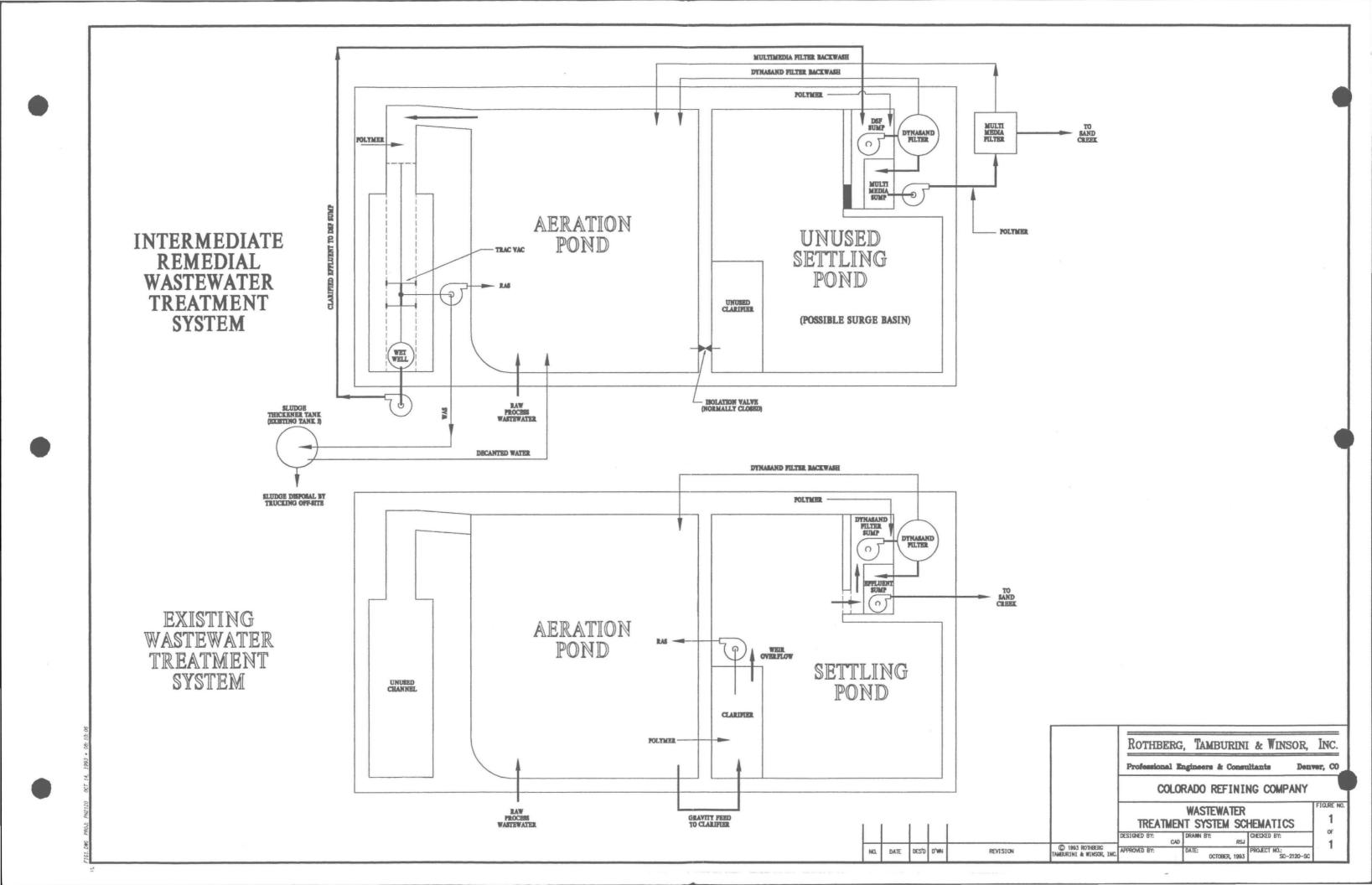


Figure 2 Process Flow ingram for Existing Wastewater Treatment System

SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN PART I GENERAL INFORMATION

1.	Name of f	acility: Col	orado Refining Company
2.	Type of f	acility: Ons	hore Facility-Petroleum Refinery
3.	Location	of facility:	5800 Brighton Blvd.
			Commerce City, Colorado 80022
4.	Name and	address of o	wner or operator:
		Name:	Same as above
	•	Address:	See above
			•
5.	Designate	d person acc	ountable for oil spill prevention at facility:
	Nam	e and Title:	S. E. Sondergard, Refinery Manager
6.	months pr	ior to Januar	a reportable oil spill event during the twelve ry 10, 1974 (effective date of 40 CFR, Part 112).
		·	
	Th Signature	1011	MANAGEMENT APPROVAL will be implemented as herein described.
	-	10000	
	Name	S. E. Sonde	
	Title	Refinery Man	nager
wit	h the prov	isions of 40	CERTIFICATION ave examined the facility, and being familiar CFR, Part 112, attest-that this SPCC Plan has ce with good engineering practices.
			Michael R. Dusenbury Printed Name of Registered Professional Engineer Michael R. Dusenbury Printed Name of Registered Professional Engineer
Dat	e <u>March 30</u>	<u>, 1993</u>]	Registration No. 15630 State Colorado

PART I GENERAL INFORMATION

7. Potential Spills-Prediction & Control: *

Source	Major Type of Failure	Total Quantity (bbls)	Rate (bbls/hr)	Direction of Flow	Secondary Containment
South 1/2 of STF	T-6	200,000	—	-	Yes
North 1/2 of STF	T-10	55,000	-	•••	Yes
ETF	T-34	65,000	-	-	Yes
HVGO TF	T-31	51,000	-	-	Yes
Slop TF	T-19	25,000	-	-	Yes
Process Area	Pipes or Vessels	1,300	-	To Oily Sewer	Water Treatment System

Discussion: In the event a spill escapes its secondary confinement, a final discharge diversion structure in the form of a drop gate dam is provided. Periodic and systematic groundwater monitoring and buried pipe pressure testing are performed to detect underground leakage.

Name of facility	Colorado Refining Company	
Our count and	0	
Operator	Same	

^{*} Map is attached showing major features and ground water monitoring wells.

PART I GENERAL INFORMATION

[Response to statements should be: YES, NO, or NA(Not Applicable).]

8.		tainment or diversionary structures or equipment to prevent oil from ching navigable waters are practicable. (If NO, complete Attachment $\underline{\text{Yes}}$
9.	Tma	pections and Records
9.		The required inspections follow written procedures. Yes
		The written procedures and a record of inspections, signed by the
	2:0	appropriate supervisor or inspector, are attached.
		Discussion: Inspections of major process equipment are done by our
		API certified refinery inspector. API procedures are followed.
		Groundwater monitoring and buried line pressure test data records
		are available at the refinery.
10.	Pe	rsonnel, Training, and Spill Prevention Procedures
	A.	Personnel are properly instructed in the following:
		(1) operation and maintenance of equipment to prevent oil
		discharges, and Yes
		(2) applicable pollution control laws, rules, and
,		regulations. NA
		Describe procedures employed for instruction:
		On the job training of new personnel by experienced personnel and
		verbal instructions by the supervisor of critical aspects of the
		job. Refinery emergency procedure actions are posted at operators'
		telephones so appropriate authorities may be notified.
	В.	Scheduled prevention briefings for the operating personnel are
		conducted frequently enough to assure adequate understanding of the
		SPCC Plan. No
		Describe briefing program:
		Periodic not scheduled discussions of potential hazards
	*	
•		
Nama	. of	facility Colorado Bofining Company
исте	: UL	facility Colorado Refining Company
Oper	ato	rSame
- K		

A.	Fac:	ility Drainage Drainage from diked storage areas is controlled as follows (include operating description of valves, pumps, ejectors, etc. (Note: Flapper-type valves should not be used):
		All diked areas have a low spot and drainage will be effected by a mobile pumping unit of adequate size. In the event a spill escapes its secondary confinement a final discharge diversion structure, in the form of a drop gate dam, is provided.
	2	Drainage from undiked areas is controlled as follows (include description of ponds, lagoons, or catchment basins and methods of retaining and returning oil to facility):
		Drainage is controlled by gravity flow inside of curbs and fire walls to oil sewer system and to API Oil-Water separator. Oil is returned to facility, water is pumped to biological treatment system. Treated water is pumped to Sand Creek. Separator and treatment systems employ pump transfer with equal standby pumping. The biological treatment system, located within a T. Farm is
		separated by a reinforced concrete dike wall.
	3.	The procedure for supervising the drainage of rain water from secondary containment into a storm drain or an open watercourse is as follows (include description of (a) inspection for pollutants, and (b) method of valving security). (A record of inspection and drainage events is to be maintained on a form similar to Attachment #3):
		For control in process area see A-2. In diked areas water is
		contained or transfered to waste water treatment by pumping if required.
Name	of	facility _ Colorado Refining Company
Oper	ator	Same

[Response to statements should be: YES, NO, or NA (Not Applicable).]

В.	Bul	s Storage Tanks
	1.	Describe tank design, materials of construction, fail-safe
		engineering features, and if needed, corrosion protection:
		Cylindrical tanks above grade, welded steel plate tanks based on
		sand cushion or concrete ring foundation. Corrosion protection
		of walls and roof by paint. Berms promote drainage away from tanks.
		Tank paint periodically renewed. New tanks T-46 & T-47 have leak
		detection membrane beneath steel floor plates. FRP or epoxy linings
		are used in tanks experiencing interior corrosion.
	2	Describe secondary containment design, construction materials, and
	₩.0.	volume Secondary containments are mostly dikes from selected native
		soil. In limited space areas walls are made of reinforced concrete.
		No concrete blocks are used as dikes. Removable gates are kept
		closed and may be opened by authorized personnel only. All dikes
		will contain the volume of the largest tank within it plus 6-
		inches of rain.
		Indice of refu.
	3.	Describe tank inspection methods, procedures, and record keeping:
	J.	besoftbe baint thepeopten meenous, procedures, and record heeping.
		Tanks in all tank farms and plant areas are manually gauged every
	•	day and the gauger is on the alert for any leaks or tank disorders.
		Daily inventory logs are used to detect any disorder.
		Periodic mechanical inspections are done by our refinery inspector.
		Records are kept at the refinery.
	4.	Internal heating coil leakage is controlled by one or more of the
		owing control factors:
		(a) Monitoring the steam return or exhaust lines for oil. NA
		Describe monitoring procedure:
		Steam coils are no longer used in bulk storage tanks
		(b) Passing the steam return or exhaust lines through a settling
		tank, skimmer, or other separation system. NA
		(c) Installing external heating systems. NA
		<u></u>
	5.	Disposal facilities for plant effluents discharged into navigable
		waters are observed frequently for indication of possible upsets
•		which may cause an oil spill event. Yes
		Describe method and frequency of observations: Oil separators skim
		and recycle oil. Water passing underflow weir is then biologically
		treated and discharged through a sand filter. Daily samples of
		of effluent water are taken and checked for quality standards.
		Through daily routine of operation throughout the plant,
		operators are constantly checking for spills and leaks.
am	e of	facility _ Colorado Refining Company
,~~	~ a+~	Come

{Response to statements should be: YES, NO, or NA (Not Applicable).}

c.	Faci	lity Transfer Operations, Pumping, and In-plant Process* Corrosion protection for buried pipelines:	
	•	(a) Pipelines are wrapped and coated to reduce Old lines No	
		corrosion. New lines Ye	<u>s</u>
		(b) Cathodic protection is provided for pipelines if determined	
		necessary by electrolytic testing. <u>NA</u> (c) When a pipeline section is exposed, it is examined and	
		corrective action taken as necessary. Ye	s
		-	
	2.	Pipeline terminal connections are capped or blank-flanged and mark	
		if the pipeline is not in service or on standby service for extend	
		periods. Describe criteria for determining when to cap or blank-flange:	<u>s</u>
		rescribe criteria for determining when to cap or brank frange.	
		for abandonment line is permanently capped or blinded. For standb	У
		service, line is valved and blinded if necessary.	
	,		
	3.	Pipe supports are designed to minimize abrasion and corrosion and	
	J.	allow for expansion and contraction. Ye	s
		Describe pipe support design:	
		Supports are steel structures of various shapes. Vertical members	
		are fireproofed to required heights. Sliding pads are provided for	
		most process piping.	
	4.	escribe procedures for regularly examining all above-ground valve	s
		and pipelines (including flange joints, valve glands and bodies,	
		catch pans, pipeline supports, locking of valves, and metal	
		surfaces):	
		Daily visual inspection by operators, plant personnel, and periodi	
		nspection by our refinery inspector. Also by teams of outside	<u>C</u>
		nspectors during turnarounds.	•
	_		
	5.	Describe procedures for warning vehicles entering the facility to	
		void damaging above-ground piping:	
		by physical barriers, warning signals, or lights.	
	_		
	*	Periodic and systematic groundwater monitoring and buried pipe pressure testing are performed. When feasible buried lines are	
		replaced with above ground lines.	
Name	of	acility Colorado Refining Company	
On	a+	Como	
oher	aLUI	Same	

(Response to statements should be: YES, NO, or NA (Not Applicable)

Operator	Same	
Name of	facility Colorado Refining Company	
5.	Drains and outlets on tank trucks and tank cars are checked for leakage before loading/unloading or departure.	r <u>Yes</u>
	disconnecting transfer line the transfer is automatically stop	
4.	An interlocked warning light, a physical barrier system, or was signs are provided in loading/unloading areas to prevent vehic departure before disconnect of transfer lines. Describe methods, procedures, and/or equipment used to prevent premature vehicular departure: If a truck does leave prior to	ular <u>No</u>
		•
	oil separator.	
	All truck spills are contained in a catch basin and drained to	
3.	The containment system will hold the maximum capacity of any s compartment of a tank truck loaded/unloaded in the plant. Describe containment system design, construction materials, an	Yes
2.	The unloading area has a quick drainage system.	Yes
1.	Loading/unloading procedures meet the minimum requirements and regulations of the Department of Transportation.	Yes
Tan]	ility Tank & Car Tank Truck Loading/Unloading Rack k car and tank truck loading/unloading occurs at the facility. , complete 1 through 5 below.)	(If <u>Yes</u>
(esponse to statements bhould set into hope and hope in the inspired set	,

{Response to statements should be: YES, NO, or NA (Not Applicable).}

	•	
E.	Sec	urity
	1.	Plants handling, processing, or storing oil are fenced. Yes
	2.	Entrance gates are locked and/or guarded when the plant is unattended or not in production. Yes
	3.	Any valves which permit direct outward flow of a tank's contents are locked closed when in non-operating or standby status. See Below
	4.	Starter controls on all oil pumps in non-operating or standby status are: (a) locked in the off position; (b) located at site accessible only to authorized personnel. Yes
	5.	Discussion of items 1 through 4 as appropriate:
	6.	Add #3: All valves on active tanks or vessels are tied to an enclosed piping system. Water draw-off valves are not, but are operated only by authorized personnel. This is typical for all valves. Discussion of the lighting around the facility: Adequate
Name	e of	facility Colorado Refining Company
		Same